

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003531**Date Inspected:** 22-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Keng Chan**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing Island, China for the purpose of observing and monitoring the fabrication of the OBG/Tower.

Bay 4

The Quality Assurance Inspector observed ZPMC personnel in process of performing fit up operations on double diaphragm plate assembly, 43 meter elevation. American Bridge/Fluor Quality Assurance Manager Don Walton informed the Quality Assurance Inspector, this will be the first attempt in fitting up the double diaphragm plate assembly. See digital photograph below.

The Quality Assurance Inspector observed ZPMC personnel in process of performing fit up operations on flange to diaphragm plate assembly.

Bay 7

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 066261 and 058102, utilizing shielded metal arc welding process on closure plates weld # FB-006-056-001/002. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2112.

The Quality Assurance Inspector observed ZPMC in process of performing a survey of Floor Beam Sub Assembly

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A4.

See digital photograph below.

The Quality Assurance Inspector observed sharp edges in a hand hole on floor beam diagonal # FB-006-043-001. The diagonal is still in process of being worked on.

The Quality Assurance Inspector observed ZPMC personnel perform thermal cutting on floor beam sub assembly FB-003-046 and FB-003-022 without the use of a mechanical guide. AWS D1.5 paragraph 3.2.2 refers to all thermal cutting operations a mechanical guide shall be provided for an accurate profile and freehand thermal cutting shall be done only where approved by the Engineer. The Quality Assurance Inspector informed ZPMC Quality Control on this issue. ZPMC Quality Control Personnel Informed the Quality Assurance Inspector that it would not happen again.

Bay 8

Floor Beam Sub Assembly

The Quality Assurance Inspector observed ZPMC welder 050323, utilizing the submerged arc welding process on complete joint penetration weld number FB-088-002-015. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2221-B-L2C-5-2.

The Quality Assurance Inspector observed ZPMC personnel in process grinding and tack welding weld run off tabs in various floor beam sub assembly.



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Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

Inspected By: Lara, Raymond

Quality Assurance Inspector

Reviewed By: Lanz, Joe

QA Reviewer